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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,878	09/05/2001	Satoshi Mori	576P040	6072

7590

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EXAMINER

SERGEANT, RABON A

ART UNIT

PAPER NUMBER

1711

4

DATE MAILED: 07/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-4

**Office Action Summary**Application No.  
**09/914,878**Applicant(s)  
**Mori et al.**Examiner  
**Rabon Sergeant**Art Unit  
**1711**

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 20 is/are rejected.
- 7) ☒ Claim(s) 4-19 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3                      6) ☐ Other:

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1. The abstract of the disclosure is objected to because its length exceeds 150 words.

Furthermore, the abstract should be only one paragraph. Correction is required. See MPEP § 608.01(b).

2. Claims 4-19 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple independent claim. See MPEP § 608.01(n). Accordingly, the claims not been further treated on the merits.

3. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the use of components (A), (B), (D), and (F), as disclosed within the specification, does not reasonably provide enablement for the use of any urethane oligomer, including fully saturated oligomers, any unsaturated polycarboxylic acid resin, any thermoplastic polymer, and any curing agent that contains any thermosetting component. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Applicants have failed to provide enablement for the use of components which fail to correspond to the disclosed reaction constituents

4. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, the use of "type" so extends "two liquid" that it is unclear with respect to exactly what system is encompassed by the claim.

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Secondly, it is unclear how “principal” is to further limit or modify “resin composition”.

Thirdly, it is unclear how to interpret what compounds or reactants are encompassed by “unsaturated group-containing polycarboxylic acid resin” and “curing agent composition which contains a thermosetting component”. For example, it is unclear if the resin is merely derived from polycarboxylic acids or if it is polycarboxylic acid group functional, and it is unclear if the curing agent encompasses any compound that will yield a crosslinked product, such as a triol to react with isocyanate groups within the urethane oligomer.

5. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Within claims 1-3, it is unclear how the language, “and the salt thereof”, further limits the claim. It is unclear what the language refers to.

Within claim 2, the language, “said polybasic acid anhydride(b)”, lacks antecedent basis.

6. Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants have failed to provide enablement for the claimed oligomer; according to the specification, the polyol, anhydride, and polyisocyanate are reacted before the hydroxy compound having ethylenically unsaturated groups is reacted. However, applicants’ claims do not reflect this sequence. Furthermore, the reaction sequences set forth within the specification contradict one

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another with respect to the reaction of the polyol, anhydride, and polyisocyanate. At page 8, the polyol, anhydride, and polyisocyanate are reacted together; however at page 14, the polyol and anhydride are reacted before the polyisocyanate is reacted. These two schemes will yield different products. As aforementioned, applicants' claims fail to be representative of either of these reaction schemes.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 06206956.

The reference discloses a urethane (meth)acrylate produced by initially reacting a polyol with a polybasic acid anhydride, which is subsequently reacted with a polyisocyanate and a hydroxy containing (meth)acrylate. See abstract. The urethane (meth)acrylate is considered to meet the claimed urethane oligomer.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

R. Sergent

June 30, 2002

  
RABON SERGENT  
PRIMARY EXAMINER